

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012588**Date Inspected:** 09-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR**CWI Name:** M. Gregson, J. Salazar**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Hinge K Pipe Beams**Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

**Hinge-K Pipe Beam Assembly 102A-2:**

The QA Inspector witnessed WID #B62 (Marcus Belgrade) utilizing a mechanical grinder, to perform grinding on the previously deposited Flux Core Arc Welding (FCAW) tack welds. The QA Inspector noted that these Partial Penetration (PJP) weld joints were designated as #W2-23 (piece mark ab106/a110) and #W2-24 (piece mark ab106/a109). The QA Inspector was later informed by QC Inspector Jose Salazar that the grinding on the tacks had been completed. QC Inspector Salazar explained that he then performed 100 % Visual and Informal Magnetic Particle Testing (MT) on the tack welds and found no rejectable indications. QA Inspector Salazar explained that WID #B62 will be setting up to perform the Submerged Arc welding (SAW) on these weld joint. QC Inspector Salazar explained that he will verify the pre-heat temperatures, prior to SAW and welding parameters during the SAW. See attached pictures below.

**Hinge-K Pipe Beam Assembly 101A-1:**

The QA Inspector witnessed OIW production personell, Troy Smith and Darren Dozier performing the initial fit up of the Fuse 120A-1 to Forging Base 102A-1. The QA Inspector noted that 2 chokers and the overhead bay crane was being utilized to maneuver the Fuse, for the fit-up. The QA Inspector noted that OIW had previously placed the forging base in the welding fixture and a set of rollers had been placed, for the Fuse. The QA Inspector

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

noted that the Fuse had circular steel placed around the Fuse, where the Fuse will set on the rollers, to protect the stainless steel overlay surface. The QA Inspector noted that QC Inspector Jose Salazar was present and QC Inspector Salazar explained that the fit-up will be verified after the tack welds are complete. See attached pictures below.

### Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 3 OIW Production, 1 QC Inspector and 1 Supervisor. The QA Inspector noted that the following personell were present at AG Machine Works: 1 AG Machinist and 1 AG Supervisor.



### Summary of Conversations:

As noted above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Vance,Sean	Quality Assurance Inspector
<b>Reviewed By:</b>	Adame,Joe	QA Reviewer

---